## DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011497 Address: 333 Burma Road **Date Inspected:** 13-Jan-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG Segment** 

## **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

**OBG Trial Assembly Yard** 

## Segment 6CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SEG031B-021. The welder is identified as #066261 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for WR9640.

### Segment 6BW/6CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW6A-001. The welder is identified as #037743 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-2213-B-U2-FCM-1.

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## Segment 6AW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SEG029B-009. The welder is identified as #054467 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for WR9729.

This QA Inspector observed the removal of the remaining portion of temporary fit up plates by arc gouging along the Side Plate segment splice.

This QA Inspector observed back gouging of the FL3 upper hold back weld at panel point 38.

Segment 5BW/5CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW5A-008. The welder is identified as #054467 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-FCM-repair-1 for CWR1054, UT repair at Y location 2572mm.

Segment 7BE

This QA Inspector observed match drilling of bolt holes in the Bottom Panel with the FL3 at panel point 52.

Segment 7AW

This QA Inspector observed beveling of the Side Plate with the use of a mechanical guided torch, cross beam side east end.

Segment 5CW

This QA Inspector observed drilling of bolt holes in the Deck Plate for Barrier Rail connection, counter weight side.

Segment 6AE

This QA Inspector observed ABF personnel performing Ultrasonic Testing (UT) of the Edge Plate to Deck Plate CJP splice, bike path side. D-scan was performed.

ZPMC Quality Control (QC) Inspector is identified as Fang Ya Jun. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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## **Summary of Conversations:**

No relevant conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Dan	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer